

REMARKS

The present communication responds to the Office Action of December 17, 2008. In that Office Action, Claims 9-15 were rejected under 35 U.S.C. §102(b) as being anticipated by JP'404 (JP-2000103404). Reconsideration of these claims is respectfully requested.

The Examiner references U.S. 6,349,848 (the '848 patent) as serving as an English translation of JP'404. The Applicants thus refer to the '848 patent to discuss the teachings of JP'404.

JP'404 discloses a medicine supply apparatus with a mechanism for unsticking stuck medicines. As discussed in the previous response to office action, the apparatus includes a controller 76 that detects a lock state caused by the stuck medicines. The controller 76 *then* causes a backward/forward rotating operation to cause the stuck medicines to drop:

When the medicines are held and stuck between the discharge port 69 and the discharge drum 53 during the dispensing operation, the motor 61 is locked, and an excess lock current flows. The controller 76 detects the lock state from the current supplied to the motor 61 by the excess current detection circuit 78. Subsequently, as shown in a timing chart of FIG. 15, at the time the lock state occurs the control circuit 77 rotates backward the motor 61 for a short period to rotate backward the discharge drum 53. Subsequently, the motor 61 is similarly rotated forward for a short period to rotate forward the discharge drum 53.

By repeating the backward/forward rotating operation several times, the stuck medicines drop (lock cancellation), the medicine detection sensor 66 generates (on) the medicine detection signal, and the controller 76 then returns the motor 61 to normal control (forward rotation) again.

'848 Patent, Col. 8, ll. 31-47. Accordingly, JP'404 discloses detecting a lock state, *then* causing a backward/forward rotating operation wherein the backward/forward rotating operation *specifically* is intended to discharge the medicine.

Claim 9 is patentable by calling for "a control device ... the control device being configured to periodically perform an abnormality detection operation in which a first energized current is supplied to the motor for rotating the motor in reverse for a predetermined period of

time less than the time interval to discharge medicine, a second energized current is supplied to the motor for rotating the motor forward for the predetermined period of time, a value of the first energized current at the motor is measured, a value of the second energized current at the motor is measured and an abnormality at the motor is determined if one of the value of the first energized current and the value of the second energized current value is outside a predetermined range.”

Contrary to the assertion of the Examiner, JP’404 does not disclose a medical supply apparatus of the type called for in Claim 9. Specifically, JP’404 does not disclose a medical supply apparatus having a control device configured to periodically perform an abnormality detection operation in which an abnormality at the motor is determined if one of the value of the first energized current and the value of the second energized current value is outside a predetermined range. Indeed, JP’404 is limited to detecting and correcting a locked state. Further, the abnormality detection operation referred to in Claim 9 comprises “in which the motor is energized with a first energized current so as to rotate in reverse for a predetermined period of time less than the time interval to discharge medicine [and] the motor is energized with a second energized current so as to rotate forward for the predetermined period of time” and an abnormality at the motor is determined if one of the value of the first energized current and the value of the second energized current is outside of a predetermined range.” JP’404 does not disclose energizing a motor for a period of time less than the time interval to discharge medicine.

Claim 9 recites supplying an energized current to the motor as part of an abnormality detection operation. JP’404 does not disclose supplying an energized current to a motor as part of an abnormality detection operation. Indeed, the backward/forward rotating operation of JP’404 is done *after* detecting a lock state. The Applicants respectfully submit that JP’404 cannot be interpreted as detecting any abnormality *during* an abnormality detection operation as claimed.

Claim 9 recites an abnormality detection operation wherein an energized current is supplied to a motor for a predetermined period of time which is less than the time interval to perform the discharging operation. Contrary to the assertion of the Examiner, JP’404 does not disclose an abnormality detection operation in which a motor is energized so as to be rotated in reverse for a predetermined period of time which is less than the time interval to discharge

medicine. JP'404 discloses "repeating the backward/forward rotating operation several times" until "the stuck medicines drop." *The '848 Patent, Col. 8, ll. 43-45*. This is necessarily sufficiently long to cause the medicine to be discharged.

The rotation for a period of time shorter than a time required for discharging medicine is an important feature of the medicine supply apparatuses called for in Claim 9. The specification of the application discusses:

As the time interval for reverse rotation and forward rotation in the abnormality detection operation is sufficiently shorter than the time interval during which medicine is discharged, medicine cannot be discharged by mistake. Further, as a motor is firstly rotated in reverse, even if the next medicine, with respect to the previous discharge operation, is on the verge of being discharged, the medicine cannot be discharged by mistake.

U.S. 2006/0230710, para. 0031, emphasis added.

Claim 10 is patentable for reasons similar to Claim 9 by calling for a medical supply apparatus comprising "a control device ... the control device being configured to periodically perform an abnormality detection operation-in which an energized current is supplied to the driving motor for driving the driving motor in a direction opposite of the predetermined direction for a predetermined period of time which is less than the time interval to perform the discharging operation, a value of the energized current at the motor is measured, and an abnormality of the motor is detected if the value of the energized current is outside a predetermined range."

JP'404 does not disclose an abnormality detection mode of the type called for in Claim 10 in which "in which an energized current is supplied to the driving motor for driving the driving motor in a direction opposite of the predetermined direction for a predetermined period of time which is less than the time interval to perform the discharging operation"

Like Claim 9, Claim 10 further recites supplying an energized current to the motor as part of an abnormality detection operation. As discussed, JP'404 does not disclose supplying an energized current to a motor as part of an abnormality detection operation.

Also like Claim 9, Claim 10 recites an abnormality detection operation wherein an energized current is supplied to a motor for a predetermined period of time which is less than the time interval to perform the discharging operation. As discussed, JP'404 does not disclose an abnormality detection operation in which a motor is energized so as to be rotated in reverse for a predetermined period of time which is less than the time interval to discharge medicine.

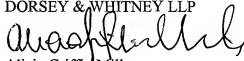
Claims 11-15 depend from Claim 10 and are patentable for the same reasons as Claim 10 and by reason of the additional limitations called for therein. New Claim 31 is different in scope than the claims of record and patentable by calling for a medicine supply apparatus of the type set forth therein having a control device configured to periodically perform an abnormality detection operation in which a first energized current is supplied to the motor for rotating the motor in reverse for a predetermined period of time which is less than the time interval to discharge medicine, a second energized current is supplied to the motor for rotating the motor forward for the predetermined period of time and an abnormality at the motor is determined if one of the value of the first energized current and the value of the second energized current is outside a predetermined range.

Claims 32-34 depend from Claim 31 and are patentable for the same reasons as Claim 31 and by reason of the additional limitations called for therein.

In view of the foregoing, it is respectfully submitted that the claims of record are allowable and that the application should be passed to issue. Should the Examiner believe that the application is not in a condition for allowance and that a telephone interview would help further prosecution of this case, the Examiner is requested to contact the undersigned attorney at the phone number below.

Respectfully submitted,

DORSEY & WHITNEY LLP

A handwritten signature in black ink, appearing to read 'Alicia Griffith Mills', written over the printed name.

Alicia Griffith Mills

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